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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,807	09/17/2003	Eiji Hayashi	Q77558	4057
65565 7590 12/20/2006 SUGHRUE-265550 2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213			EXAMINER BOES, TERENCE	
			ART UNIT	PAPER NUMBER
			3682	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/20/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/663,807	Applicant(s) HAYASHI, EIJI	
	Examiner Terence Boes	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application..
- 4a) Of the above claim(s) 16-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>09/17/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 16-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 07/07/2006.

Drawings

2. Figures 7-11 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The information disclosure statement filed 08/10/2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Specifically, JP 63-132158 has not been submitted. The examiner notes JP 63-132158 (as on the IDS) may be a typographical error of JP 63-153156. The examiner further notes JP 63-153156, as well as JP 59-39352 have been received only in part (page 1), and that figures 7 and 8 referred to in the background of the art discuss additional art not disclosed in the portion of JP 63-153156 which has been received.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with indefinite language to numerous to list in their entirety. What follows are a few examples. The examiner suggests rewriting the claims to correct for indefinite language.

Claim 1 recites the limitation "the tube guide" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the insertion position" in line 16. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites "...the tube guide is interposed between the ball scooping portion and the tube guide insertion hole..." in lines 21-22, rendering the claim indefinite. Because the ball scooping portion is a portion of the tube guide it is not understood how the tube guide, which includes the ball scooping portion, can be interposed between the ball scooping portion and the tube guide insertion hole.

Claim 3 recites the limitation "the axial line" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 4, 5, and 6 recites the limitation "the lead angle" in line 4. There is insufficient antecedent basis for these limitations in the claim.

Claim 11 recites the limitation "the outer surface of the nut" in line 19. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the insertion position" in line 21. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites "...the tube guide is interposed between the ball scooping portion and the tube guide insertion hole..." in lines 23-24, rendering the claim indefinite. Because the ball scooping portion is a portion of the tube guide, it is not understood how the tube guide, which includes the ball scooping portion, can be interposed between the ball scooping portion and the tube guide insertion hole.

Claims 11-15 recite "...as set forth in Claim [#]..." rendering the claims indefinite. It is unclear if claims 11-15 are independent or dependent claims. Although claims 11-

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15 appear to be written as independent claims, i.e. the claims recite the same structural elements as independent claim 1; the claims also recite "...as set forth in Claim...", rendering the claims indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-15, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Ebina et al. US 6,098,117.

Fujita discloses:

- a screw shaft (1) including a spiral-shaped ball rolling groove formed in an outer peripheral surface thereof;
- a nut (2) including a spiral-shaped ball rolling groove formed in an inner peripheral surface thereof;
- a plurality of balls (11) disposed in a ball rolling passage formed by the two ball rolling grooves;
- a ball circulation tube (3) forming a ball circulation passage and including a ball scooping portion in an end portion thereof (end portion scoops balls from 15),
- wherein the tube guide (15) is used for mounting the ball circulation tube onto the nut, has an outer shape matched to the inner shape of a tube

guide insertion hole (8) formed in the nut so as to correspond to the insertion position of the ball scooping portion, and includes a scooping portion insertion hole (10a) consisting of a penetration hole formed so as to have an inner shape matched to the outer shape of the ball scooping portion (both shapes are circular and as such are matched), and wherein the tube guide is interposed between the ball scooping portion and the tube guide insertion hole.

- wherein the inner shape of the tube guide insertion hole is formed a cylindrical shape (see figure 9).
- wherein the axial line of the cylindrical shape is set perpendicular to the axial line of the nut (see figure 7).
- wherein the scooping portion insertion hole has a ball circulation passage scooping angle set so as to correspond to the lead angle of the ball screw (see figure 8).
- wherein the tube guide is made of elastic material (C14/L35-40).

Conclusion

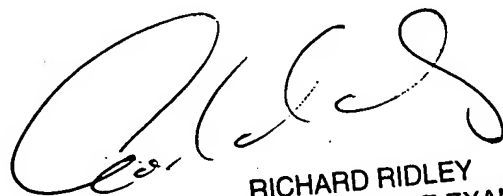
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Specifically, US 6,681,651 discloses a similar device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TB
12/13/06

A handwritten signature in black ink, appearing to read 'Richard Ridley', is written over a circular stamp.

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER